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(19) (CA) APPLICATION FOR CANADIAN PATENT (12)

- (54) Protective Headgear for Infants and Toddlers
- (72) Smith, Nancy Canada;
- (71) Same as inventor
- (57) 2 Claims

tice: This application is as filed and may therefore contain an incomplete specification.



## PROTECTIVE HEADGEAR FOR INFANTS AND TONDLERS

### **ABSTRACT**

Protective headgear for infants and toddlers consisting of one thick stuffed tube and several smaller crown bands stuffed with polyester fibre fill or like substances; casings of said head and crown bands is of durable, attractive textile fabric. The invention is inexpensive to produce, adjustable, lightweight, and has a very attractive design. Infants wear the hat once they begin to sit up and to interact with their environment, from sitting up, crawling, and learning to walk. The hat is meant to protect the child's head from minor collisions associated with everyday living of children approximately aged six months to two years old. The invention is also designed to be attractive, and incorporates novel designs, so that parents will be pleased to put it on their child's head and encourage their child to wear the headgear daily.

# PROTECTIVE HEADGEAR FOR INFANTS AND TODDLERS

#### **SPECIFICATION**

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This invention relates to infant protective headgear. This invention is designed for infants and toddlers daily use while they explore their new environment and learn all the motor processes, sitting up, crawling, walking associated with children between the ages of approximately six months and two years of age. This invention is designed to be inexpensive to produce, comfortable for the child to wear, as well as attractive to the parents. The invention also may be used by invalids.

The present invention is unique, new, and fully distinguishable from prior art which are uncomfortable, impractical, too complicated and hence too expensive to produce, and highly unconventional in appearance.

Protective headgear for children has been contemplated for decades, and the need for headgear which protects a child's head during the formative years of development between 6 mos. and 24 mos. is well understood. Yet, to date, no previous art has been able to satisfy the needs of the infant AND the parent in order that the need for this headgear can be truly satisfied in the marketplace.

In many ways the Fitch design, 1913, U.S. Patent # 1,072,321, was the simplest and the best. Though, as Richoux (U.S. Patent # 5,075,903) points out, Fitch's design lacks sufficient protective surface area. Additionally, the inflatable rubber tubes are narrow, and the choice of rubber makes Fitch's device look like a contraption for an animal. In warm weather, the device would cause chafing due to sweat and dirt gathering between the rubber device and a baby's 25 delicate skin.

Cunnane's device, while recognizing the need for an attractive appearance, falls short of its goal. Due to its bonnet-like appearance, it offers no protection to the forehead where most bumps occur in infants and toddlers. It is also very cumbersome, and despite efforts to provide ventilation, it would be hot.

30 Inherent in Franzen's invention is the recognition that the circumference of the child's head is where most growth occurs. Yet though the headgear is adjustable, the design provides too minimal protection for the ages 6 mos.. to 24 mos.. Additionally, the headstrap is not sufficiently attached to the headband.

Steeles' invention's objective is not directed toward the everyday activities of infants and 35 toddlers. As a result, gaps between concentric rings leave the child's head unnecessarily prone to injury. The design is also too complicated to make inexpensively.

Richoux's invention is specifically designed to protect the occipital area of a child's head from serious injuries such as subdural hematoma or skull fracture, a dubious claim, hence the large pad situated at the rear of the headgear. Additionally, the use of elastic in the headband of said art makes it difficult to adapt to ages 6 mos. to 24 mos.. This age group experiences growth in head circumference of approximately six inches, 12 centimeters. Either the headband will be loose for the infant, or tight on a toddler. As a result, an adjustable headstrap seems misplaced and instead only serves to pull upon an elasticized headband, which, in turn slips upward, pulling on the elasticized chin strap and rendering the headgear ineffective. Additionally, the rear head pad, measuring between 4 to 7 inches, could cause discomfort for crawling infants. Fig. 5 of Richoux's invention shows the hat on an older child. A crawling infant, however, moves with its head at an approximate 80 degree angle to the nape of its neck. The year head pad would rub against an infant's neck.

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### SUMMARY OF THE INVENTION

The present invention overcomes the difficulties and inconveniences of previous art. The headband is made of durable textile fabric and stuffed with new yieldable material such as polyester fibre fill. The headband is approximately 1 1/2" thick and between 2 and 3" wide, providing much protection to the sides, front and back of the child's head, while maintaining a simple and inexpensive design. Additionally, the headband is pliant enough to follow the natural curves at the back of the child's head, rather than rigidly fitting on the head horizontally. One segment of elastic, approximately 4" long and 1" wide, joins the ends of the headband at the back of the head. An additional padded back flap with Velcro, snaps, hooks, buttons or other devices with a similar fastening purpose fastens at the back, providing additional padding to the head, and acting as a means of adjusting the headband up to approximately six inches. To provide additional protection while maintaining adequate ventilation, the present headgear has five crown bands that radiate from the centre top of the headgear. The chin strap is made of two strips of textile fabric, each one attached to the distal end on either side of the headgear. Preferably two rings attached to the one end of one strip, while the other strip is threaded through the rings to provide a firm yet flexible hold under the child's chin.

Considerable emphasis is given to the tastes of parents and caretakers of infants and young children. They are the ones who ultimately decide to buy and to use the headgear. At least two models of the headgear will be made available: For boys an attractive, textile fabric-covered piping is sewn into the seam of the headband, around the entire circumference of the har. For girls, lace is sewn into the seam instead of piping. Bows are sewn on the front of each design. Additionally, from time to time, other fanciful figures or novel designs may be adhered to the headgear such as animal ears, feathers, and the like. The present invention is very well suited to its objectives of versatility, comfort and ventilation, protection of the head, attractiveness, and cost effectiveness.

An objective of this invention is to provide protective headgear for children aged six months to two years of age.

Another objective of this invention is to provide a protective headgear for young children that provides sufficient and effective protective surface area by the headband.

A further objective of this invention is to provide adjustable and secure headgear for infants.

A still further objective of this invention is to provide an infants' protective headgear that is simple in construction and economically manufactured.

Yet another objective of this invention is to provide an infant's protective headgear that is attractive to parents and guardians and that supports intriguing accessories such as piping, lace, ribbon, bows, animal ears, etcetera.

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## BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a profile view embodying the invention on the head of a young child.

Fig. 2 is a plan view (as seen from the underside of the hat) of the invention.

Fig. 3 is a rear elevation of the hat as taken from 1-1 in Fig. 2.

Fig. 4 is a front elevation of an alternative embodiment of the invention, illustrating the configuration and placement of fabric panels and animal ears.

# DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

In Fig. 1, the preferred embodiment of the invention shows a thick padded headband that is easily adjustable by a padded back flap 2, which is sewn to the head band. Attached to the headband at regular intervals are padded crown bands 3,4,5 which are sewn into place at area 6 where the crown bands intersect. A chin strap 7, made of fabric in the preferred embodiment, though it may be made of other materials, is fastened by rings 8. At areas 20, 21, 22 the crown bands are sewn into the seam of the headband as is the lace or piping 9 or other novel designs. At area 23 a bow or other novel designs such as fashioned animal eyes, shapes, buttons or other notions are attached.

In Fig. 2 a plan view of the headgear is shown whereby the back flap 2 is disengaged. Elastic 11, 12 is sewn into the seam which connects the inner sides of the back flap and the inner side of the headband at area 10. In the preferred embodiment of the invention five padded crown bands provide protection to the head as well as hold the hat in place on the child's head. In the preferred embodiment, the fifth crown band is sewn to the elastic at area 13. When back flap is engaged to the headband, Velcro at 14 and 15 are brought together and provide a snug fit for any child. For a very young child's head, the ends of the headband 16, 17 almost meet and the elastic and crown band 11, 12, 13, tend to fold slightly to one side of the inside of the hat. On the head of an older sixteen-month old toddler, for example, elastic at 11, 12 stretches slightly. Hook and loop fasteners at 14, 15 adjust and hold the hat comfortably in place on the child's head. Thus, the hat can be easily adjusted to the child's head each time he wears the hat. In an alternate embodiment of the invention, the number of crown bands vary, as shown in phantom in Fig. 2.

Fig. 3 is a rear view section of Fig. 2, highlighting the configuration of the adjustable features of the said headgear.

Fig. 4 is a front elevation of an alternate embodiment of the invention, in which, 4.1, 4.2. 4.3 are examples of where canvas or other fabric pieces might be placed to protect the child's head from sunlight. The canvas could be sewn into two antipodal side seams of each crown band, and into the seam of the headband, forming a sun hat with padded headband and crown bands. 4.4 shows an alternate embodiment of the invention in which fanciful animal ears are sewn into an outwardly facing seam of the crown band. 4.5 illustrates where teddy bear eyes or similar decoration might appear on the headband on an alternate embodiment of the invention.

It will be understood that the particular embodiment of the invention described herein is capable of further modification, and this application is intended to cover any variations, uses, or adaptations of the invention following, in general, the principles of the invention, including departures from the present embodiment of the invention as is customary practice in the art to which the invention pertains and as may be applied to the essential features set forth in this application and as fall within the scope of the invention or the limits of the appended claims.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

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1. A protective headgear for infants and toddlers consisting of a thick, padded headband and padded adjustable back flap, first end of said headband is connected to second end by an elastic or similar device in which first end of said headband is attached by sewing to first end of said elastic, and the second end of said elastic is attached to second end of said headband at the point wherein the said headband and said back flap are sewn together, said adjustable back flap opens in either direction, said back flap located at back, front, or at either side of said headband, said headband supporting one to eight padded crown bands that provide further protection to the

head, said headband donning bows or other fanciful figures, said headband comprised of lace or piping sewn into the seam of said headband, said headband further comprising a chin strap made of similar textile fabric as said headband, though other materials such as elastic, ribbon will serve the same purpose, as will rings, hook and loop fasteners, buttons or like devices serve as means of fastening said chin strap under chin.

2. A protective headgear as claimed in claim 1 in which alternate embodiments of the invention supports fanciful figures such as animal ears or the like on one to eight padded crown bands, or eyes, shapes or other fanciful figures on the said headband, or fabric panels attached to said crown bands and said headband to form a sun hat, or any combination of said alternate

10 embodiments.

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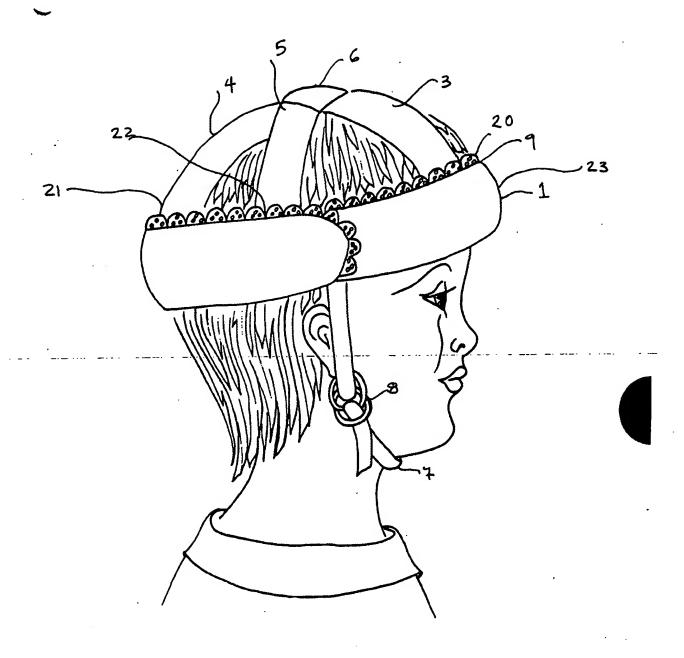


Fig. 1

